

21. (Once amended) A method for producing the polypeptide according to claim 16, comprising the steps of:

- (a) culturing a host cell which has been transformed or transfected with a vector which expresses the encoded polypeptide; and optionally
(b) recovering the expressed polypeptide.

22. (Once amended) The method for producing a pest resistant plant, comprising transforming the plant genome to include at least one nucleic acid molecule according to claim 17.

23. (Once amended) A transgenic plant that contains the nucleic acid molecule according to claim 17.

24. A transgenic plant according to claim 23, further comprising at least one additional DNA molecule encoding a protein or peptide.

C2 31. (Once amended) A transgenic plant expressing pesticidally effective concentrations of the chimeric polypeptide according to claim 16.

C3 53. (Once amended) A method for producing a plant-noxious protein, the method comprising extracting the protein from a plant incorporating in its genome the nucleic acid molecule according to claim 17.

54. (Once amended) Seed that is the product of the plant according to claim 23, wherein said seed comprises said nucleic acid molecule.

Please add new claims 55-64.

C4 55. (New) The nucleic acid of claim 16, wherein the vacuole targeting sequence is a potato proteinase inhibitor signal sequence.

56. (New) The nucleic acid of claim 16, wherein the biotin binding sequence is a streptavidin sequence.

57. (New) The nucleic acid of claim 56, wherein the streptavidin sequence is selected from a CORE streptavidin sequence, a synthetic CORE streptavidin sequence, and SYNSAV.

58. (New) The nucleic acid of claim 56, wherein the streptavidin sequence comprises the sequence set forth in SEQ ID NO:10.

59. (New) The nucleic acid of claim 16, wherein the biotin binding sequence is an avidin sequence.

60. (New) The nucleic acid of claim 55, wherein the vacuole targeting sequence is a potato proteinase inhibitor I signal sequence.

61. (New) The nucleic acid of claim 55, wherein the vacuole targeting sequence is a potato proteinase inhibitor II signal sequence.

62. (New) The nucleic acid of claim 55, wherein the vacuole targeting sequence is a potato proteinase inhibitor I signal sequence and the biotin binding sequence is an avidin sequence.

63. (New) The nucleic acid of claim 55, wherein the vacuole targeting sequence is a potato proteinase inhibitor II signal sequence and the biotin binding sequence is a streptavidin sequence.

64. (New) The nucleic acid of claim 55, wherein the vacuole targeting sequence is an N-terminal targeting sequence.

IN THE ABSTRACT:

Please replace the abstract with the following abstract:

C5 This invention relates to nucleic acids encoding chimeric polypeptides comprising vacuole targeting sequences and plant-noxious sequences and especially pest